San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

APR 2 4 2012

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Proposed Authority to Construct / Certificate of Conformity (Minor Mod)**
District Facility # S-3755
Project # 1120070

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Seneca Western Minerals Corp, located at the heavy oil western stationary source, which has been issued a Title V permit. Seneca Western Minerals Corp is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project authorizes additional locations of operation and modifications of permit conditions of a steam generator for Rule 4320 compliance.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authority to Construct # S-3755-11-8 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

for David Warner
Director of Permit Services

Enclosures
cc: Richard Edgehill, Permit Services

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

APR 2 4 2012

Timothy Alburger
Seneca Western Minerals Corp
2131 Mars Ct.
Bakersfield, CA 93308

Re: Proposed Authority to Construct / Certificate of Conformity (Minor Mod)
District Facility # S-3755
Project # 1120070

Dear Mr. Alburger:

Enclosed for your review is the District's analysis of your application for Authority to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes additional locations of operation and modifications of permit conditions of a steam generator for Rule 4320 compliance.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures
cc: Richard Edgehill, Permit Services

San Joaquin Valley Air Pollution Control District
Authority to Construct

Authorization at New Locations and Revision of NOx Emissions Limit for Rule 4320 Compliance

Facility Name:	Seneca Western Minerals	Date:	March 28, 2012
Mailing Address:	2131 Mars Ct.	Engineer:	Richard Edgehill
	Bakersfield, CA 93308	Lead Engineer:	Allan Phillips APSure AQE
Contact Person:	Stephanie Pesek and Ashley Rosia, Natural Resources Group (agents)		
Telephone/email:	702-694-8003 sapesek@nrg-llc.com; alrosia@nrg-llc.com		MAR 2 8 2012
Fax:	702-694-8010		
Application #'s:	S-3755-11-8		
Project #'s:	S-1120070		
Deemed Complete:	January 12, 2012		

I. PROPOSAL

Seneca Western Minerals Corp. (Seneca) recently received an Authority to Construct (ATC) (ATC S-3755-11-7) to add FGR to a 20 MMBtu/hr gas-fired steam generator for compliance with the Rule 4320 Staged Enhanced Limit of 9 ppmv NOx @ 3% O_2.

In this project, Seneca is requesting authorization to operate S-3755-11 at various specified locations within Seneca's Heavy Oil Western Stationary Source S-1114 and S-3755) (HOWSS). While operating at Midway Sunset and South Midway Sunset (MSS), the unit will comply with the ATC S-3755-11-7 limit of 9 ppmv @ 3% O_2. At North Lost Hills (NLH), the unit will combust less than 50% by volume PUC-quality natural gas and will comply with the applicable Rule 4320 NOx limit of 12 ppmv @3% O_2.

Please note that Conditions #2 and #8 of the current permit and ATC S-3755-11-7 limit the sulfur content of gas combusted by S-3755-11 and of produced (TEOR) gas to no more than 1.0 gr S/100scf and 500 ppmvd, respectively. Condition # 7 of the current permit and ATC S-3755-11-7 limits the quantity of produced gas (TEOR) combusted by '-10 and '-11 to 300 mscf/day. Applicant has requested that these and related conditions be deleted and/or replaced.

The new (underlined) and deleted (in strike-out text) conditions are as follows:

~~Steam generator shall operate only in Sections 7, 18, 19, and 20 T11N R23W and Section 13 T11N R24W. [District Rule 4102] Y~~

~~Steam generator shall be fired only on produced (TEOR) gas, and PUC quality natural gas with a sulfur content of not greater than 1.0 gr/100 dscf. [District Rule 2201] N~~

~~Except during startup and shutdown emission rates shall not exceed any of the following: PM10: 0.0117 lb/MMBtu, NOx (as NO2): 9 ppmv @ 3% O2, VOC: 0.008 lb/MMBtu or CO: 154 ppmvd @ 3% O2. [District Rules 2201& 4306] N~~
~~Combined produced gas (TEOR) combusted by '-10 and '-11 shall not exceed 300 mscf/day. [District Rule 2201] N~~

~~Sulfur content of produced (TEOR) gas combusted shall not exceed 500 ppmvd. [District Rule 2201] N~~

Steam generator shall operate only in Sections 7, 18, 19, and 20 T11N, R23W, Section 13 T11N, R24W, Section 24 T26S R20E, Sections 14 and 15 T31S, R22E. [District Rule 4102] Y

Steam generator shall only be fired on produced (TEOR) gas, PUC quality natural gas, or gas containing less than 50% by volume PUC quality natural gas with a sulfur content not exceeding 5.0 gr S/100 scf or scrubbed to remove 95% sulfur. [District Rules 2201 and 4320].

Except when the fuel is less than 50% by volume PUC quality gas and during startup and shutdown, NOx emission rates shall not exceed 9 ppmv @ 3% O2. [District Rule 2201 and 4320] N

When the fuel is less than 50% by volume PUC quality gas determined on a calendar month basis, NOx emission rates shall not exceed 12 ppmv @ 3% O2. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rules 2201 and 4320] Y

Emission rates shall not exceed any of the following: PM10: 0.0117 lb/MMBtu, VOC: 0.008 lb/MMBtu or CO: 154 ppmvd @ 3% O2. [District Rules 2201, 4306, and 4320] N

The project is exempt from BACT and offsets as it is being done solely for compliance with District Rule 4320. Offsets are also not required.

Seneca's new Title V Permit becomes effective on March 31, 2012. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Seneca must apply to administratively amend their Title V permit.

Disposition of Outstanding ATCs

ATC S-3755-11-7 will be canceled and replaced by the proposed ATC. ATC S-3755-11-8 and PTO S-3755-11-6 are included in **Attachment I**.

II. APPLICABLE RULES

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99)
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4301 Fuel Burning Equipment (12/17/92)
Rule 4304 Equipment Tuning Procedure for Boilers, Steam Generators and Process Heaters (10/19/95) – **not applicable** – Alternate Monitoring Scheme A
Rule 4305 Boilers, Steam Generators and Process Heaters – Phase II (8/21/03)

Rule 4306 Boilers, Steam Generators and Process Heaters – Phase III (10/16/08)
Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr (10/16/08)
Rule 4405 Oxides Of Nitrogen Emissions From Existing Steam Generators Used In Thermally Enhanced Oil Recovery -Central And Western Kern County Fields (12/17/92)
Rule 4406 Sulfur Compounds From Oil-Field Steam Generators – Kern County (12/17/92)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

II. PROJECT LOCATION

Unit S-3755-11 will be authorized to operate at the following locations within Seneca's HOWSS:

Field	Section	Township	Range
North Lost Hills	24	26S	20E
North Lost Hills	24	26S	20E
North Lost Hills	24	26S	20E
North Midway-Sunset	15	31S	22E
North Midway-Sunset	15	31S	22E
North Midway-Sunset	15	31S	22E
North Midway-Sunset	14	31S	22E
North Midway-Sunset	14	31S	22E
South Midway-Sunset (Maricopa)	7	11N	23W
South Midway-Sunset (Maricopa)	12	11N	24W
South Midway-Sunset (Maricopa)	13	11N	24W
South Midway-Sunset (Maricopa)	18	11N	23W
South Midway-Sunset (Maricopa)	18	11N	23W
South Midway-Sunset (Maricopa)	19	11N	23W
South Midway-Sunset (Maricopa)	20	11N	23W

None of the locations are within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. PROCESS DESCRIPTION

The steam generator produces steam which is injected into the formation to lower the viscosity of the oil thereby facilitating the extraction of the oil.

Steam generator S-3755-11 is currently authorized to operate only in various sections within T11N, R23W and T11N, R24W (near Maricopa, CA). In this project S-3755-11 will be authorized to operate at additional locations in Seneca's HOWSS.

Permit conditions limiting sulfur and NOx will be revised, deleted, and replaced for compliance with Rule 4320 as discussed in the proposal section.

V. EQUIPMENT LISTING

Pre-Project Equipment Description:

PTO S-3755-11-3:
20 MMBTU/HR TEOR GAS AND NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME LE MODEL 4211-21/X1288 LOW NOX BURNER

ATC S-3755-11-7 (canceled and replaced):
MODIFICATION OF 20 MMBTU/HR TEOR GAS AND NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME LE MODEL 4211-21/X1288 LOW NOX BURNER: TUNE BURNER AND/OR ADD FGR TO ACHIEVE 9 PPMV NOX FOR RULE 4320

Proposed Modification:

S-3755-11-8:
MODIFICATION OF 20 MMBTU/HR TEOR GAS AND NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME LE MODEL 4211-21/X1288 LOW NOX BURNER: TUNE BURNER AND/OR ADD FGR TO ACHIEVE 9 PPMV NOX FOR RULE 4320, AUTHORIZE TO OPERATE AT VARIOUS SPECIFIED LOCATIONS IN SENECA'S HOWSS, REVISE SULFUR AND NOX LIMITS FOR RULE 4320 COMPLIANCE

Post Project Equipment Description:

S-3755-11-8:
20 MMBTU/HR TEOR GAS AND NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME LE MODEL 4211-21/X1288 LOW NOX BURNER

VI. EMISSION CONTROL TECHNOLOGY EVALUATION

The unit is equipped with an ultra-low NO_X burner and will be fired on PUC-quality natural gas or TEOR gas containing less than 50% by volume PUC-quality natural gas.

Ultra Low-NO_X burners reduce NO_X formation by producing lower flame temperatures (and longer flames) than conventional burners. Conventional burners thoroughly mix all the fuel and air in a single stage just prior to combustion, whereas low-NO_X burners delay the mixing of fuel and air by introducing the fuel (or sometimes the air) in multiple stages. Generally, in the first combustion stage, the air-fuel mixture is fuel rich. In a fuel rich environment, all the oxygen will be consumed in reactions with the fuel, leaving no excess oxygen available to react with nitrogen to produce thermal NO_X. In the secondary and tertiary stages, the combustion zone is maintained in a fuel-lean environment. The excess air in these stages helps to reduce the flame temperature so that the reaction between the excess oxygen with nitrogen is minimized.

VII. GENERAL CALCULATIONS

A. Assumptions

- The maximum operating schedule is 24 hours per day
- Natural gas Heating Value: 1,000 Btu/scf (District Practice)
- Higher heating value for produced (TEOR) gas: 650 Btu/scf
- F-Factor for Natural Gas: 8,578 dscf/MMBtu corrected to 60°F (40 CFR 60, Appendix B)
- Heat input capacity 20 MMBtu/hr

PTO S-3755-11-6 (pre-project)

- Maximum H_2S concentration in TEOR gas: 500 ppmv
- Maximum amount of produced (TEOR) gas combusted in S-3755-10 and '-11: 300 mscf/day

ATC S-3755-11-8 (post-project)

- Sufur content of fuel gas and scrubbed gas: $\leq$ 5 gr S/100 scf. Note that there is no sulfur limit for gas scrubbed to remove 95% sulfur.

B. Emission Factors

Pre-Project Emission Factors (EF1)

PTO S-3755-11-3

NOx: 0.018 lb/MMBtu (15 ppm)

VOC: (5.5 lbs/MMscf)(MMscf/650 MM Btu)

= 0.0085 lb/MMBtu

CO: (74 lb/MMscf) (MMscf/650 MM Btu) = 0.1138 lb/MMBtu

(74 lb/MMscf)((MMscf/650 MM Btu)(MMBtu/8578* dscf @ 0% O_2)[(20.9 – 3)/20.9 dscf @ 3% O_2/dscf @ 0% O_2](lbmol/28 lb)(379 ft^3/lbmol)10^6

= 154 ppmv @ 3% O_2

PM10: (7.6 lbs/MMscf)(MMscf/650 MM Btu)

= 0.00117 lb/MMBtu

SOx: (500 ft^3 H_2S/10^3mscf)(300 mscf/day)(lbmol H_2S/379 ft^3)(1 lb SO_2/lbmol H_2S)

X (64 lb SO2/lbol SO2

= 25.3 lb/day (9245 lb/yr) – SLC combined '-10 and '-11

Post-Project Emission Factors (EF2)

There are no proposed changes to PM10, CO, and VOC emissions factors.

NOx: 0.014 lb/MMBtu, 12 ppmv @ 3% O_2 (less than 50% PUC-quality natural gas)
0.011 lb/MMBtu, 9 ppmv @ 3% O_2 (PUC-quality natural gas)

The revised SO_x emission factor is calculated as follows:

$$\left(\frac{64\,lb\cdot SO_x}{32\,lb\cdot S}\right)\frac{5\,gr\cdot S}{100\,dscf}\left(\frac{1\,lb}{7{,}000\,gr}\right)\frac{dscf}{1{,}000\,Btu}\left(\frac{10^6\,Btu}{MMBtu}\right)=0.0143\frac{lb\cdot SO_x}{MMBtu}$$

C. Calculations

1. Pre-Project Potential to Emit (PE1) – PTO S-3755-11-3

Pollutant	Daily PE1			
	EF1 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE1 (lb/day)
NO_X	0.018	20	24	8.6
SO_X		20	24	25.3*
PM_{10}	0.0117	20	24	5.6
CO	0.114	20	24	54.6
VOC	0.0085	20	24	4.1

Pollutant	Annual PE1			
	EF1 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE1** (lb/year)
NO_X	0.018	20	8,760	3,154
SO_X		20	8,760	9,245*
PM_{10}	0.0117	20	8,760	2,050
CO	0.114	20	8,760	19,973
VOC	0.0085	20	8,760	1,489

*SLC '-10 and '-11
**PAS emissions profile annual emissions
PM10: 5.6 x 365 = 2044 lb/yr
CO: 54.6 x 365 = 19,929 lb/yr
VOC: 4.1 x 365 = 1497 lb/yr

2. Post-Project Potential to Emit (PE2)

The PE2 for each pollutant is calculated with the following equation:

- PE2 = EF (lb/MMBtu) × Heat Input (MMBtu/hr) × Op. Sched. (hr/day or hr/year)

NLH

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO_X	0.0140	20	24	6.7
SO_X	0.01430	20	24	6.9
PM_{10}	0.0117	20	24	5.6
CO	0.114	20	24	54.6
VOC	0.0085	20	24	4.1

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
NO_X	0.014	20	8,760	2,453
SO_X	0.01430	20	8,760	2,505
PM_{10}	0.0117	20	8,760	2,050
CO	0.114	20	8,760	19,973
VOC	0.0085	20	8,760	1,489

MSS

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO_X	0.0110	20	24	5.3
SO_X	0.01430	20	24	6.9
PM_{10}	0.0117	20	24	5.6
CO	0.114	20	24	54.6
VOC	0.0085	20	24	4.1

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
NO_X	0.011	20	8,760	1,927
SO_X	0.01430	20	8,760	2,505
PM_{10}	0.0117	20	8,760	2,050
CO	0.114	20	8,760	19,973
VOC	0.0085	20	8,760	1,489

S-3755-11

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO_X	6.7	2,453*
SO_X	6.9	2,505
PM_{10}	5.6	2,050
CO	53.0	19,973
VOC	4.1	1,489

* NOx PE established at N LH (12 ppmv @ 3% O_2 NOx)

SSIPE			
	PE1 (lb/year)	PE2 (lb/year)	PE2 – PE1 (lb/year)
NO_X	3,154	2,453	-701
SO_X	9,245(SLC)*	2,505	-6740
PM_{10}	2,050	2,050	0
CO	19,938	19,938	0
VOC	1,482	1,482	0

*included on '-10 as explained above

The emissions profile is included in **Attachment II.**

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

SSPE1 calculations are necessary to aid the following determinations:

- If the facility is becoming a new Major Source, or
- An offset threshold will be surpassed, or
- A Stationary Source Increase in Permitted Emissions (SSIPE) public notice is triggered

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

The Pre-Project Stationary Source Potential to Emit (SSPE1) was calculated for project 1112927 (ATC S-3755-11-7), the most recent NSR project finalized in PAS.

Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
Pre-Project SSPE (SSPE1)	106,758	478,975	94,610	288,656	134,222

4. Post-Project Stationary Source Potential to Emit (SSPE2)

SSPE2 calculations are necessary to aid the following determinations:

- If the facility is becoming a new Major Source,
- An offset threshold will be surpassed, or
- An SSIPE public notice is triggered

Pursuant to Section 4.10 of District Rule 2201, the Post-Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been

banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Post Project Stationary Source Potential to Emit [SSPE2] (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
Pre Project SSPE (SSPE1)	106,758	478,975	94,610	288,656	134,222
ATC S-3755-11-7 Changes	-701	-6740	0	0	0
Post Project SSPE (SSPE2)	106,057	472,235	94,610	288,656	134,222

5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a major source is a stationary source with a Post-Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the Major Source threshold values (excluding ERCs banked onsite that have not been used onsite).

Major Source Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE1	106,758	478,975	94,610	288,656	134,222
SSPE2	106,057	472,235	94,610	288,656	134,222
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	Yes	No	Yes	Yes

This source is an existing Major Source for NO_X, SO_X, CO, and VOC only and will remain so. No change in Major Source status is proposed or expected as a result of this project.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed on a pollutant-by-pollutant basis to determine the amount of offsets required, where necessary, when the SSPE1 is greater than the offset threshold. This project is exempt from offsets pursuant to Rule 2201, Section 4.6.8 as the modification is being made solely to comply with Rule 4320. Therefore, BE calculations are not required.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

The stationary source is non-major for PM_{10} and therefore the project is not a SB 288 Major Modification for PM_{10}.

Since this facility is a major source for NOx, SOx, and VOCs, the project's PE2s are compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO_x	2,453	50,000	No
SO_x	2,505	80,000	No
VOC	1,489	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute a SB288 Major Modification.

8. Federal Major Modification

District Rule 2201, Section 3.17 states that Federal Major Modifications are the same as "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA. SB 288 Major Modifications are not Federal Major Modifications if they meet the criteria of the "Less-Than-Significant Emissions Increase" exclusion.

A Less-Than-Significant Emissions Increase exclusion is for an emissions increase for the project, or a Net Emissions Increase for the project (as defined in 40 CFR 51.165 (a)(2)(ii)(B) through (D), and (F)), that is not significant for a given regulated NSR pollutant, and therefore is not a Federal Major Modification for that pollutant.

- To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.
- To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
- If the project is determined not to be a Federal Major Modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).
- Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.

Pollutant	Threshold (lb/year)
VOC	0
NOx	0
PM10	30,000
SOx	80,000

The Net Emissions Increases (NEIs) for purposes of determination of a "Less-Than-Significant Emissions Increase" exclusion will be calculated below to determine if this project qualifies for such an exclusion.

Net Emissions Increase for Existing Units (NEI)

Per 40 CFR 51.165 (a)(1)(xxviii) and 40 CFR 51.165 (a)(2)(ii)(C) for all existing units,

NEI = PAE – BAE

where,

BAE = Baseline Actual Emissions which are the actual emissions created by the project during the baseline period. The BAE are calculated pursuant to 40 CFR 51.165 (a)(1)(xxxv)(A) through (D).

PAE = Projected Actual Emissions which are the post-project projected actual emissions of the existing units in this project pursuant to 40 CFR 51.165 (a)(1)(xxviii).

For no increase in design capacity PAE is the annual emissions rate at which the unit is projected to emit in any one year selected by the operator within 5 years after the unit resumes normal operation (10 years for units with an increase in design capacity or potential to emit).

Please note that Revised Draft Rule 2201 Major Modification Implementation Policy (2/8/11) version) states that (for Case 3)

Case 3:

For modifications to existing emission units solely for District, State, or Federal rule compliance, where there are no changes in the capacity of the unit, the default assumption is that the modification will not allow the emission unit to operate at a higher utilization rate. For such projects, the emission increase is presumed to be 0 for all pollutants.

Therefore the project is not a Federal Major Modification.

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are calculated below.

QNEC			
	PE1 (lb/year)	PE2 (lb/year)	QNEC (lb/qtr)
NO_X	3,154	2,453	-175
SO_X	9,245(SLC)*	2,505	-1685
PM_{10}	2,050	2,050	0
CO	19,938	19,938	0
VOC	1,482	1,482	0

VIII. COMPLIANCE

District Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

However, BACT shall not be required for the following:

4.2.3 For existing facilities, the installation or modification of an emission control technique performed solely for the purpose of compliance with the requirements of District, State or Federal air pollution control laws, regulations, or orders, as approved by the APCO, shall be exempt from Best Available Control Technology for all air pollutants, provided all of the following conditions are met:

4.2.3.1 There shall be no increase in the physical or operational design of the existing facility, except for those changes to the design needed for the installation or modification of the emission control technique itself;

4.2.3.2 There shall be no increase in the permitted rating or permitted operating schedule of the permitted unit;

4.2.3.3 There shall be no increase in emissions from the stationary source that will cause or contribute to any violation of a National Ambient Air Quality Standard, Prevention of Significant Deterioration increment, or Air Quality Related Value in Class I areas; and

4.2.3.4 The project shall not result in an increase in permitted emissions or potential to emit of more than 25 tons per year of NO_x, or 25 tons per year of VOC, or 15 tons per year of SO_x, or 15 tons per year of PM10, or 50 tons per year of CO.

Since each of the above-listed criteria are met, BACT is not required for any pollutant.

B. Offsets

1. Offset Applicability

The proposed modifications are solely for compliance with Rule 4320, and are exempt from offsets if the following criteria are satisfied. Rule 2201, Section 4.6.8 provides the following exemption from offsets.

Emission offsets shall not be required for the following:

4.6.8 For existing facilities, the installation or modification of an emission control technique performed solely for the purpose of compliance with the requirements of District, State or Federal air pollution control laws, regulations, or orders, as approved by the APCO, shall be exempt from offset requirements for all air pollutants provided all of the following conditions are met:

4.6.8.1 There shall be no increase in the physical or operational design of the existing facility, except for those changes to the design needed for the installation or modification of the emission control technique itself;

4.6.8.2 There shall be no increase in the permitted rating or permitted operating schedule of the permitted unit;

4.6.8.3 There shall be no increase in emissions from the stationary source that will cause or contribute to any violation of a National Ambient Air Quality Standard, Prevention of Significant Deterioration increment, or Air Quality Related Value in Class I areas; and

4.6.8.4 The project shall not result in an increase in permitted emissions or potential to emit of more than 25 tons per year of NO_x, or 25 tons per year of VOC, or 15 tons per year of SO_x, or 15 tons per year of PM-10, or 50 tons per year of CO.

Since each of the above-listed criteria are met, offsets are not required for any pollutant.

2. Quantity of Offsets Required

As seen above, the project meets the exemption requirements of section 4.6.8 of District Rule 2201; therefore offset calculations are not necessary and offsets are not required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:
a. Any new Major Source, which is a new facility that is also a Major Source,
b. Major Modifications,
c. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
d. Any project which results in the offset thresholds being surpassed, and/or
e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Source

As demonstrated in section VII.C.5 above, the facility is not becoming a Major Source as a result of this project.

b. Major Modification

As demonstrated in VII.C.7, this project does not constitute Major Modification; therefore, public noticing for Major Modification purposes is not required.

c. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project; therefore public noticing is not required for this project for Potential to Emit exceeding the 100 lb/day limit.

d. Offset Threshold

Public notification is required if the Pre-Project Stationary Source Potential to Emit (SSPE1) is increased from a level below the offset threshold to a level exceeding the emissions offset threshold, for any pollutant.

There is no increase in permitted emissions as a result of this project. Therefore, the SSPE is not increasing with this project and an offset threshold cannot be surpassed as a result of this project. A public notice will not be required for offset threshold purposes.

e. SSIPE > 20,000 lb/year

An SSIPE exceeding 20,000 pounds per year for any one pollutant triggers public notice, where SSIPE = SSPE2 - SSPE1.

There is no increase in permitted emissions as a result of this project. As a result, SSPE is not increasing with this project. Therefore, the SSIPE is zero for all pollutants and public notice will not be required for SSIPE purposes.

2. Public Notice Action

As discussed above, public notice will be required for this project.

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

The DELs for the unit is based on the use of natural gas as a fuel and will be stated in the form of emission factors as shown:

Steam generator shall only be fired on produced (TEOR) gas, PUC quality natural gas, or gas containing less than 50% by volume PUC quality natural gas with a sulfur content not exceeding 5.0 gr S/100 scf or scrubbed to remove 95% sulfur. [District Rules 2201 and 4320].

Except when the fuel is less than 50% by volume PUC quality gas (Section 24, T26S, R20E and Section 15, T31S, R22E) and during startup and shutdown, NOx emission rates shall not exceed 9 ppmv @ 3% O2. [District Rule 2201 and 4320] N

When the fuel is less than 50% by volume PUC quality gas (Section 24, T26S, R20E and Section 15, T31S, R22E) NOx emission rates shall not exceed 12 ppmv @ 3% O2. [District Rules 2201 and 4320] N

Emission rates shall not exceed any of the following: PM10: 0.0117 lb/MMBtu, VOC: 0.008 lb/MMBtu or CO: 154 ppmvd @ 3% O2. [District Rules 2201, 4306, and 4320] N

E. Compliance Assurance

1. Source Testing

Startup source testing will be not be required as the steam generator met the 9 ppmv NOx @ 3% NOx and 12 ppmv NOx @ 3% NOx emission limits on 12-15-11

This unit is subject to District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase 2*, District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase 3,* and *District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5 MMBtu/hr.* Source testing requirements, in accordance with District Rules 4305, 4306, and 4320 have been included on the ATC.

2. Monitoring

As required by District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase 2*, District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase 3*, and *District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam*

Generators, and Process Heaters Greater than 5 MMBtu/hr, this unit is subject to monitoring requirements. Monitoring requirements, in accordance with District Rules 4305, 4306, and 4320 have been included on the ATC.

3. **Recordkeeping**

As required by District Rule 4305, *Boilers, Steam Generators and Process Heaters, Phase 2*, District Rule 4306, *Boilers, Steam Generators and Process Heaters, Phase 3*, and *District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5 MMBtu/hr* this unit is subject to recordkeeping requirements. Recordkeeping requirements, in accordance with District Rules 4305, 4306, and 4320 have been included on the ATC.

4. **Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

District Rule 4001 New Source Performance Standards

40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction).

The steam generators listed in this project are subject to this subpart. The applicable monthly fuel use record keeping requirements of section 60.48c(g) will be satisfied by District Rule 4306 and Rule 4320 requirements.

The applicable 2-year record retention requirement of section 60.48c(i) will be subsumed by the District's 5-year record retention requirement.

40 CFR Part 60, Subpart A, section 14, defines the meaning of modification to which the the standards are applicable. §60.14, paragraph (e)(5) states that the following will not be considered as a modification: *"the addition or use of any system or device whose primary funtion is the reduction of air pollutants, except when an emission control system is removed or replaced by a system which the Administrator determines to be less environmentally beneficial".*

No newly constructed or reconstructed units are proposed in this project, nor is the unit being modified (as defined above). Since the permittee is retrofitting the unit with FGR for compliance with District rules and regulations, the requirements of these sections do not apply to the unit.

District Rule 4101 Visible Emissions

District Rule 4101, Section 5.0, indicates that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour, which is dark or darker than Ringlemann 1 or equivalent to 20% opacity.

The unit is currently in compliance with the rule and the project is not expected to affect the compliance status. Continued compliance is expected.

District Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

A permit condition will be listed on the permit as follows:

- {98} No air contaminant shall be released into the atmosphere, which causes a public nuisance. [District Rule 4102]

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 - Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

Since the applicant is not proposing an increase in emissions with this project, a health risk assessment is not necessary and no further risk analysis is required.

District Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

The unit is currently in compliance with the rule and the project is not expected to affect the compliance status. Continued compliance is expected.

District Rule 4301 Fuel Burning Equipment

This rule specifies maximum emission rates in lb/hr for SO_2, NO_2, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to $\leq$ 0.1 gr/scf. The unit is currently in compliance with the rule and the project is not expected to affect the compliance status. Continued compliance is expected.

District Rule 4305 Boilers, Steam Generators and Process Heaters – Phase 2
District Rule 4306 Boilers, Steam Generators and Process Heaters – Phase 3

This unit has a maximum heat input of 20 MMBtu/hr. The unit is currently in compliance with the rules and the project is not expected to affect the compliance status.

In addition, this unit is also subject to *District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5 MMBtu/hr.* Source testing, monitoring and recordkeeping requirements of Rule 4320 are equal to or more stringent than the requirements of these rules; therefore, continued compliance is expected.

District Rule 4320 Advance Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater than 5 MMBtu/hr

Section 5.2 NOx and CO Emission Limits

The unit is subject to the following NOx limits in Table 2 (bold type), as shown below.

Oilfield Steam Generators

Rule 4320 Emissions Limits				
Category	Operated on gaseous fuel		Operated on liquid fuel	
	NO_X Limit	CO Limit	NO_X Limit	CO Limit
2. Units with a total rated heat input >20.0 MMBtu/hr	a) Standard Schedule 7 ppmv or 0.008 lb/MMBtu; or	400 ppmv	40 ppmv or 0.052 lb/MMBtu	400 ppmv
	b) Staged Enhanced Schedule Initial Limit 9 ppmv or 0.011 lb/MMBtu; and			
	Final Limit 5 ppmv or 0.0062 lb/MMBtu			
3. Units firing on less than 50%, by volume, PUC quality gas.	**Staged Enhanced Schedule Initial Limit 12 ppmv or 0.014 lb/MMBtu; and**	400 ppmv	40 ppmv or 0.052 lb/MMBtu	400 ppmv
	Final Limit 9 ppmv or 0.011 lb/MMBtu			

The proposed NO_x emission factors 9 ppmv @ 3% O2 (MSS) and 12 ppmv @ 3% O2 (NLH).

The proposed CO emission factor is 154 ppmvd @ 3% O_2.

Therefore, compliance with Section 5.2 of District Rule 4320 is expected.

Permit conditions listing the emissions limits are listed in the DEL section above.

Section 5.4 Particulate Matter Control Requirements

Section 5.4 of the rule requires one of four options for control of particulate matter: 1) combustion of PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases, 2) limit fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic, 3) install and properly operate an emission control system that reduces SO_2 emissions by at least 95% by weight; or limit exhaust SO_2 to less than or equal to 9 ppmv corrected to 3.0% O2 or 4) refinery units, which require modification of refinery equipment to reduce sulfur emissions, shall be in compliance with the applicable requirement in Section 5.4.1 no later than July 1, 2013.

The permit conditions listing these emissions limits are listed in the DEL section above.

Section 5.6 Startup and Shutdown Provisions

Section 5.6 states that on and after the full compliance deadline specified in Section 5.0, the applicable emission limits of Sections 5.2 Table 1 and 5.5.2 shall not apply during start-up or shutdown provided an operator complies with the requirements specified in Sections 5.6.1 through 5.6.5.

Seneca Western Minerals has proposed to delete PTO condtions limiting start-up and shutdown to 2 hours and 2 hours, respectively as the burners stop and start quickly (email 4-19-12) with good control of emissions during these periods.

Section 5.7 Monitoring Provisions

Section 5.7.1 requires that permit units subject to District Rule 4320, Section 5.2 shall either install and maintain an operational APCO approved Continuous Emission Monitoring System (CEMS) for NO_X, CO and O_2, or implement an APCO-approved alternate monitoring. Consistent with current permit requirements, Seneca proposes to continue implementing Alternate Monitoring Scheme A (pursuant to District Policy SSP-1105), which requires that monitoring of NO_X, CO, and O_2 exhaust concentrations shall be conducted at least once per month (in which a source test is not performed) using a portable analyzer.

Section 5.8 Compliance Determination

Section 5.8.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu), emission limits or the concentration (ppmv) emission limits specified in Section 5.2. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

Section 5.8.2 requires that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

Section 5.8.4 requires that for emissions monitoring pursuant to Sections 5.7.1 and 6.3.1 using a portable NO_X analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period.

Section 5.8.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

Appropriate conditions are listed on the current PTO and proposed ATC.

Section 6.1 Recordkeeping

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.5 shall be maintained for five calendar years and shall be made available to the APCO and EPA upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

Appropriate conditions are listed on the current PTO and proposed ATC.

Section 6.2, Test Methods

Section 6.2 identifies District-approved source testing methods for the pollutants listed.

Section 6.3, Compliance Testing

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.1 and 5.2.3 not less than once every 12 months. Upon demonstrating compliance on two consecutive compliance source tests, the following source test may be deferred for up to thirty-six months.

In addition, since the applicant has proposed to use pre-approved Alternate Monitoring Scheme "A" using a portable analyzer, the tune-up requirements listed in Section 6.3.1 are not applicable to the boiler. Section 6.3.1 also requires that, during the 36-month source testing interval, the owner/operator shall monthly monitor the operational characteristics recommended by the unit manufacturer. Since the pre-approved Alternate Monitoring Scheme "A" using a portable analyzer requires monthly monitoring of NO_X, CO, and O_2 exhaust emissions concentrations, operational characteristics monitoring requirement is satisfied, and no further discussion is required.

Appropriate conditions are listed on the current PTO and proposed ATC.

Section 7.0, Compliance Schedule

Section 7.0 identifies the dates by which the operator shall submit an application for an ATC and the date by which the owner shall demonstrate compliance with this rule.

The unit will be in compliance with the emissions limits listed in Table 1, Section 5.2 of this rule, and periodic monitoring and source testing as required by District Rule 4320. Therefore, requirements of the compliance schedule, as listed in Section 7.0 of District Rule 4320, are satisfied. No further discussion is required.

Conclusion

Conditions will be incorporated into the ATC in order to ensure compliance with each section of this rule.

District Rule 4405 Oxides of Nitrogen Emissions from Existing Steam Generators Used in Thermally Enhanced Oil Recovery – Central and Western Kern County Fields

This rule limits NOx emissions from existing steam generators used in thermally enhanced oil recovery operations prior to August 22, 1986. The steam generators in this project are subject to a NOx limit well below the 0.14 lb/MMBTU limit allowed by this rule for natural gas-fired units. Therefore, continued compliance is expected.

Rule 4406 Sulfur Compounds from Oil-Field Steam Generators – Kern County

This rule limits SOx emissions from existing steam generators used in oil field operations prior to September 12, 1979. Sulfur compound emissions (as S) from the steam generators in this project are limited to an average rate below the 0.11 lb/MMBTU limit for sulfur (as S) allowed by the rule. Continued compliance is expected.

District Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO_2, on a dry basis averaged over 15 consecutive minutes. The unit is currently in compliance with the rule and the project is not expected to affect the compliance status.

Therefore, compliance with District Rule 4801 requirements is expected.

California Health & Safety Code 42301.6 (School Notice)

This facility is not located within 1,000 feet of a school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly

evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District conducted a Risk Management Review and concludes that potential health impacts are less than significant.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. RECOMMENDATION

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct S-3755-11-8 subject to the permit conditions on the attached draft Authority to Construct in **Attachment III.**

X. BILLING INFORMATION

Annual Permit Fees			
Permit Number	**Fee Schedule**	**Fee Description**	**Annual Fee**
S-3755-11	3020-02-H	20 MMBtu/hr	$1,030.00

Attachments

Attachment I: Current PTO S-3755-11-6 and ATC S-3755-11-7
Attachment II: Emissions Profile
Attachment III: Draft ATC

Attachment I:
Current PTO S-3755-11-6 and ATC S-3755-11-7

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-3755-11-7 **ISSUANCE DATE:** 10/31/2011

LEGAL OWNER OR OPERATOR: SENECA WESTERN MINERALS CORP.
MAILING ADDRESS: 2131 MARS CT
BAKERSFIELD, CA 93308

COPY

LOCATION: HEAVY OIL WESTERN

EQUIPMENT DESCRIPTION:
MODIFICATION OF 20 MMBTU/HR TEOR GAS AND NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME LE MODEL 4211-21/X1288 LOW NOX BURNER: TUNE BURNER AND/OR ADD FGR TO ACHIEVE 9 PPMV NOX FOR RULE 4320

CONDITIONS

1. Steam generator shall operate only in Sections 7, 18, 19, and 20 T11N R23W and Section 13 T11N R24W. [District Rule 4102]
2. Steam generator shall be fired only on produced (TEOR) gas, and PUC quality natural gas with a sulfur content of not greater than 1.0 gr/100 dscf. [District Rule 2201]
3. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 1081, 2201]
4. Except during startup and shutdown emission rates shall not exceed any of the following: PM10: 0.0117 lb/MMBtu, NOx (as NO2): 9 ppmv @ 3% O2, VOC: 0.008 lb/MMBtu or CO: 154 ppmvd @ 3% O2. [District Rules 2201& 4306]
5. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320]
6. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, 4306, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S-3755-11-7 : Mar 28 2012 8:12AM -- EDGEHILR : Joint Inspection Required with RINALDIR

7. Combined produced gas (TEOR) combusted by '-10 and '-11 shall not exceed 300 mscf/day. [District Rule 2201]
8. Sulfur content of produced (TEOR) gas combusted shall not exceed 500 ppmvd. [District Rule 2201]
9. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 &4320]
10. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 & 4320]
11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 & 4320]
12. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 & 4320]
13. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 4306]
14. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306 and 4320]
15. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081]
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 & 4320]
18. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 & 4320]
19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
20. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

21. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 6.3.1, 4306, 6.3.1 and 4320]
22. If permittee fails any compliance demonstration for NOx and CO emissions when testing not less than once every 36 months, source testing for NOx and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.4.2 and 4305]
23. Permittee shall maintain records of the types (TEOR and/or PUC quality natural gas), higher heating value, and quantities of fuel gas combusted each day. [District Rule 1070]
24. Except when not in use sulfur content of produced (TEOR) gas combusted shall be measured and recorded once per week using ASTM method D3246 or double GC for H2S and mercaptans or Draeger tube analysis. Sulfur content of produced (TEOR) gas shall be measured within one day of restarting unit if the unit has not been in use for more than 7 days. [District Rule 2201]
25. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3Aor ARB Method 100, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306 and 4320]
26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-3755-11-6 **EXPIRATION DATE:** 02/29/2016

EQUIPMENT DESCRIPTION:
20 MMBTU/HR TEOR GAS AND NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME LE MODEL 4211-21/X1288 LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. Steam generator shall operate only in Sections 7, 18, 19, and 20 T11N R23W and Section 13 T11N R24W. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Steam generator shall be fired only on produced (TEOR) gas, and PUC quality natural gas with a sulfur content of not greater than 1.0 gr/dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 1081, 2201] Federally Enforceable Through Title V Permit
4. Except during startup and shutdown emission rates shall not exceed any of the following: PM10: 0.0117 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2, VOC: 0.008 lb/MMBtu or CO: 154 ppmvd @ 3% O2. [District Rules 2201& 4306, 5.1] Federally Enforceable Through Title V Permit
5. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rules 4305 and 4306, 5.3] Federally Enforceable Through Title V Permit
6. The duration of each startup and shutdown period shall not exceed 2.0 hours. [District Rules 4305 and 4306, 5.3] Federally Enforceable Through Title V Permit
7. Combined produced gas (TEOR) combusted by '-10 and '-11 shall not exceed 300 mscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Sulfur content of produced (TEOR) gas combusted shall not exceed 500 ppmvd. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4306, 5.4] Federally Enforceable Through Title V Permit
10. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4306, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4306, 5.4] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4306, 5.4] Federally Enforceable Through Title V Permit
13. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 4306, 5.4] Federally Enforceable Through Title V Permit
14. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306, 5.5] Federally Enforceable Through Title V Permit
17. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306, 5.5] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306, 6.2] Federally Enforceable Through Title V Permit
20. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306, 6.2] Federally Enforceable Through Title V Permit
21. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306, 6.2] Federally Enforceable Through Title V Permit
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306, 5.5] Federally Enforceable Through Title V Permit
23. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 6.3.1, and 4306, 6.3.1] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of the types (TEOR and/or PUC quality natural gas), higher heating value, and quantities of fuel gas combusted each day. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Except when not in use sulfur content of produced (TEOR) gas combusted shall be measured and recorded once per week using ASTM method D3246 or double GC for H2S and mercaptans or Draeger tube analysis. Sulfur content of produced (TEOR) gas shall be measured within one day of restarting unit if the unit has not been in use for more than 7 days. [District Rule 2201] Federally Enforceable Through Title V Permit
26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306, 6.1] Federally Enforceable Through Title V Permit
27. The operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown. [District Rule 4306, 6.1] Federally Enforceable Through Title V Permit

Attachment II
Emissions Profile

Application Emissions

Permit #: S-3755-11-8 **Last Updated**
Facility: SENECA WESTERN MINERALS CORP. 03/27/2012 EDGEHILR

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	2453.0	2505.0	2050.0	19973.0	1489.0
Daily Emis. Limit (lb/Day)	6.7	6.9	5.6	53.0	4.1
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	-175.0	-1685.0	0.0	0.0	0.0
Q2:	-175.0	-1685.0	0.0	0.0	0.0
Q3:	-175.0	-1685.0	0.0	0.0	0.0
Q4:	-176.0	-1685.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Attachment III
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-3755-11-8 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA WESTERN MINERALS CORP.
MAILING ADDRESS: 2131 MARS CT
BAKERSFIELD, CA 93308

LOCATION: HEAVY OIL WESTERN

EQUIPMENT DESCRIPTION:
MODIFICATION OF 20 MMBTU/HR TEOR GAS AND NATURAL GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME LE MODEL 4211-21/X1288 LOW NOX BURNER: TUNE BURNER AND/OR ADD FGR TO ACHIEVE 9 PPMV NOX FOR RULE 4320, AUTHORIZE TO OPERATE AT VARIOUS SPECIFIED LOCATIONS IN SENECA'S HOWSS, REVISE SULFUR AND NOX LIMITS FOR RULE 4320 COMPLIANCE

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Steam generator shall operate only in Sections 7, 18, 19, and 20 T11N, R23W, Section 13 T11N, R24W, Section 24 T26S R20E, Sections 14 and 15 T31S, R22E. [District Rule 4102]
4. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 1081, 2201] Federally Enforceable Through Title V Permit
5. Steam generator shall only be fired on produced (TEOR) gas, PUC quality natural gas, or gas containing less than 50% by volume PUC quality natural gas with a sulfur content not exceeding 5.0 gr S/100 scf or scrubbed to remove 95% sulfur. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S-3755-11-8 : Apr 19 2012 11:22AM -- EDGEHILR : Joint Inspection NOT Required

6. Except when the fuel is less than 50% by volume PUC quality gas and during startup and shutdown, NOx emission rates shall not exceed 9 ppmv @ 3% O2. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

7. When the fuel is less than 50% by volume PUC quality gas, NOx emission rates shall not exceed 12 ppmv @ 3% O2. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

8. Emission rates shall not exceed any of the following: PM10: 0.0117 lb/MMBtu, VOC: 0.008 lb/MMBtu or CO: 154 ppmvd @ 3% O2. [District Rules 2201, 4306, and 4320] Federally Enforceable Through Title V Permit

9. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 &4320] Federally Enforceable Through Title V Permit

10. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 & 4320] Federally Enforceable Through Title V Permit

11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 & 4320] Federally Enforceable Through Title V Permit

12. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 & 4320] Federally Enforceable Through Title V Permit

13. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rules 4306 and 4320] Federally Enforceable Through Title V Permit

14. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 & 4320] Federally Enforceable Through Title V Permit

17. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 & 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

20. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 6.3.1, 4306, 6.3.1 and 4320] Federally Enforceable Through Title V Permit

21. If permittee fails any compliance demonstration for NOx and CO emissions when testing not less than once every 36 months, source testing for NOx and CO emissions shall be conducted not less than once every 12 months. [District Rules 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit

22. Fuel H2S, total sulfur, and methane content of combusted gas shall be determined whenever there is a change in fuel type and semi-annually thereafterusing the test methods (or other approved methods listed in this permit) H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320, 6.2] Federally Enforceable Through Title V Permit

23. Permittee shall maintain records of the types (TEOR and/or PUC quality natural gas), fuel sulfur content and % volume of PUC quality natural gas, higher heating value, and quantities of fuel gas combusted each day. [District Rule 1070] Federally Enforceable Through Title V Permit

24. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3Aor ARB Method 100, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

26. ATC S-3755-11-7 is hereby canceled. [District Rule 2201] Federally Enforceable Through Title V Permit